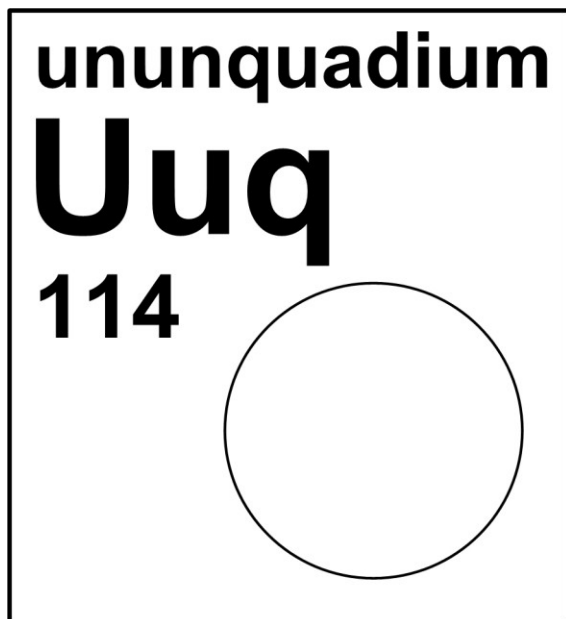





## ununquadium



$^{285}\text{Uuq}$	$^{286}\text{Uuq}$	$^{287}\text{Uuq}$	$^{288}\text{Uuq}$	$^{289}\text{Uuq}$
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Stable isotope	Atomic mass	Mole fraction
(none)		

### Half-life of radioactive isotope

Less than 1 second	
Between 1 second and 1 hour	
Greater than 1 hour	

### Important applications of stable and/or radioactive isotopes

A report on the discovery of ununquadium was released in 1999. Ununquadium is Latin for one-one-four (un-un-quadium) and this is a temporary place holder name for this element until further studies are conducted.

The scientists responsible for producing this element are from the Joint institute for Nuclear Research in Russia. Ununquadium is the result of fusing  $^{48}\text{Ca}$  and  $^{244}\text{Pu}$  atoms together. The fusion of these two atoms has only been successful a few times and therefore, more research is needed to determine the physical characteristics of the element as well as future uses.

Applications: Ununquadium has no known isotopic applications aside from scientific research.



Figure 1: This is a picture of the research team at the Joint institute for Nuclear Research in Russia. They are standing around one of the mass separators that they use to produce super heavy elements. (Photo Source: YURI GRIPAS Gamma Liaison, Joint Institute for Nuclear Research).

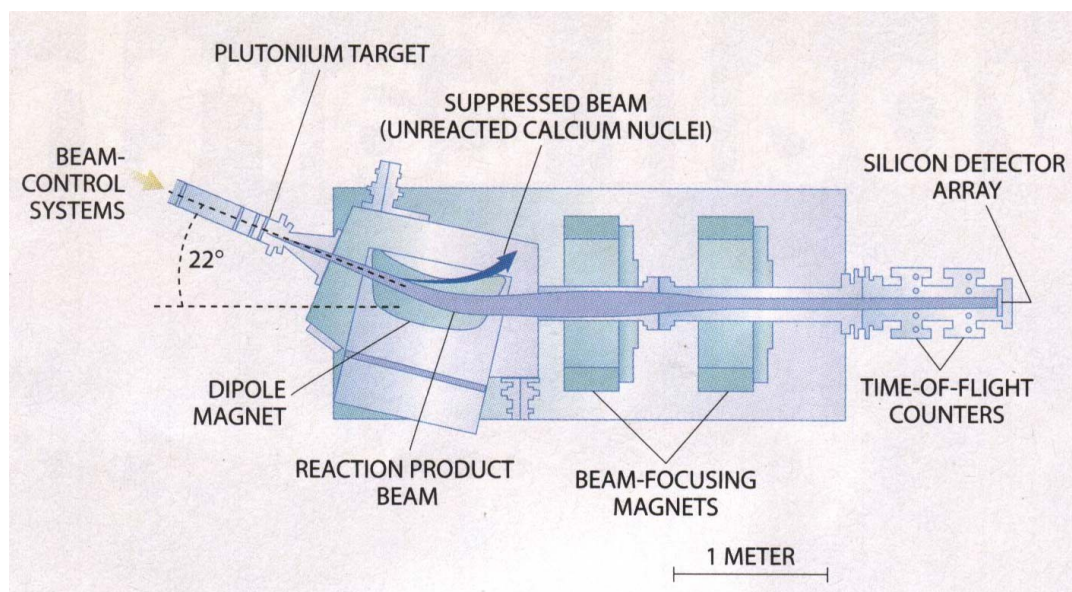


Figure 2: This is a schematic of one of the gas separators at the JINR in Dubna, Russia. (Diagram Source: Laurie Grace, Joint Institute for Nuclear Research).